

## General

### Title

Osteoporosis management in women who had a fracture: percentage of women 67 to 85 years of age who suffered a fracture and who had either a bone mineral density (BMD) test or prescription for a drug to treat or prevent osteoporosis in the six months after the fracture.

### Source(s)

National Committee for Quality Assurance (NCQA). HEDIS 2016: Healthcare Effectiveness Data and Information Set. Vol. 1, narrative. Washington (DC): National Committee for Quality Assurance (NCQA); 2015. various p.

National Committee for Quality Assurance (NCQA). HEDIS 2016: Healthcare Effectiveness Data and Information Set. Vol. 2, technical specifications for health plans. Washington (DC): National Committee for Quality Assurance (NCQA); 2015. various p.

## Measure Domain

### Primary Measure Domain

Clinical Quality Measures: Process

### Secondary Measure Domain

Does not apply to this measure

## Brief Abstract

### Description

This measure is used to assess the percentage of women 67 to 85 years of age who suffered a fracture and who had either a bone mineral density (BMD) test or prescription for a drug to treat or prevent osteoporosis in the six months after the fracture.

### Rationale

Osteoporosis is a skeletal disorder characterized by compromised bone strength that puts a person at increased risk for fractures. Morbidity and mortality related to osteoporotic fractures are a major health

issue. Ten million Americans have osteoporosis, and another 18 million are at risk for osteoporosis due to low bone mass (National Institutes of Health [NIH] Consensus Development Panel on Osteoporosis Prevention, Diagnosis, and Therapy, 2001). Eighty percent of people with osteoporosis are women (NIH Consensus Development Panel on Osteoporosis Prevention, Diagnosis, and Therapy, 2001). Women who suffer a fracture are at increased risk of suffering additional fractures.

Treatment of osteoporotic fractures is estimated at \$10 to \$15 billion annually in the United States (U.S). In 1995, osteoporotic fractures caused 432,000 hospital admissions, 2.5 million physician visits and 180,000 nursing home admissions. The aging U.S. population is likely to increase the future financial cost of osteoporosis care.

One study showed that less than 5 percent of patients with osteoporotic fractures are referred for medical evaluation and treatment (NIH Consensus Development Panel on Osteoporosis Prevention, Diagnosis, and Therapy, 2001). Another retrospective study of over 1,000 postmenopausal women who sustained a fracture of the distal radius found that only 24 percent received either a diagnostic evaluation or treatment for the condition (Stephen & Wallace, 2001).

## Evidence for Rationale

National Committee for Quality Assurance (NCQA). HEDIS 2016: Healthcare Effectiveness Data and Information Set. Vol. 1, narrative. Washington (DC): National Committee for Quality Assurance (NCQA); 2015. various p.

NIH Consensus Development Panel on Osteoporosis Prevention, Diagnosis, and Therapy. Osteoporosis prevention, diagnosis, and therapy. JAMA. 2001 Feb 14;285(6):785-95. [PubMed](#)

Stephen AB, Wallace WA. The management of osteoporosis. J Bone Joint Surg Br. 2001 Apr;83(3):316-23. [49 references] [PubMed](#)

## Primary Health Components

Osteoporosis; fracture; bone mineral density (BMD) test; drug prescription

## Denominator Description

Medicare-enrolled women age 67 to 85 years as of December 31 of the measurement year, with a Negative Diagnosis History, who had an outpatient visit, an observation visit, an emergency department (ED) visit, a nonacute inpatient discharge or an acute inpatient discharge for a fracture during the Intake Period (see the related "Denominator Inclusions/Exclusions" field)

## Numerator Description

Appropriate testing or treatment for osteoporosis after the fracture defined by any of the following criteria:

- A bone mineral density (BMD) test, in any setting, on the Index Episode Start Date (IESD) or in the 180-day (6-month) period after the IESD

- If the IESD was an inpatient stay, a BMD test during the inpatient stay

- Osteoporosis therapy on the IESD or in the 180-day (6-month) period after the IESD

- If the IESD was an inpatient stay, long-acting osteoporosis therapy during the inpatient stay

- A dispensed prescription to treat osteoporosis on the IESD or in the 180-day (6-month) period after the IESD

See the related "Numerator Inclusions/Exclusions" field.

## Evidence Supporting the Measure

### Type of Evidence Supporting the Criterion of Quality for the Measure

A formal consensus procedure, involving experts in relevant clinical, methodological, public health and organizational sciences

One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed journal

### Additional Information Supporting Need for the Measure

- Osteoporosis is a bone disease characterized by low bone mass, which leads to bone fragility and increased susceptibility to fractures of the hip, spine and wrist (National Institute of Arthritis and Musculoskeletal and Skin Diseases [NIAMS], 2012). Osteoporotic fractures, particularly hip fractures, are associated with chronic pain and disability, loss of independence, decreased quality of life and increased mortality (U.S. Preventive Services Task Force [USPSTF], 2011).
- By 2025, annual fractures are expected to rise by almost 50 percent and incur \$25.3 billion in health care costs (Burge et al., 2007).
- Osteoporosis is more common in women than men and is more common in white persons than in any other racial group (USPSTF, 2011). The prevalence of osteoporosis increases with age: 7 percent of women 50 to 59 have osteoporosis, 10 percent of women 60 to 69, 27 percent of women 70 to 79 and 35 percent of women 80 years and older have it (Looker et al., 2012).
- Osteoporotic fractures are responsible for almost 2.5 million medical office visits and for more than 432,000 hospital and 180,000 nursing home admissions each year (U.S. Department of Health and Human Services [DHHS] & Office of the Surgeon General, 2004).
- Osteoporosis is a serious disease in the elderly that can impact their quality of life. With appropriate screening and treatment, the risk of osteoporosis-related fractures can be reduced.

### Evidence for Additional Information Supporting Need for the Measure

Burge R, Dawson-Hughes B, Solomon DH, Wong JB, King A, Tosteson A. Incidence and economic burden of osteoporosis-related fractures in the United States, 2005-2025. *J Bone Miner Res.* 2007 Mar;22(3):465-75. [PubMed](#)

Looker AC, Borrud LG, Dawson-Hughes B, Shepherd JA, Wright NC. Osteoporosis or low bone mass at the femur neck or lumbar spine in older adults: United States, 2005-2008. NCHS data brief no 93. Hyattsville (MD): National Center for Health Statistics (NCHS); 2012.

National Committee for Quality Assurance (NCQA). The state of health care quality 2015. Washington (DC): National Committee for Quality Assurance (NCQA); 2015. 205 p.

National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS). Osteoporosis: overview. Bethesda (MD): National Institutes of Health (NIH); 2012 Jan. 5 p.

U.S. Department of Health and Human Services (DHHS), Office of the Surgeon General. Bone health and osteoporosis: a report of the Surgeon General. Rockville (MD): U.S. Department of Health and Human Services (DHHS); 2004.

U.S. Preventive Services Task Force (USPSTF). Recommendations and rationale: screening for osteoporosis in postmenopausal women. Rockville (MD): Agency for Healthcare Research and Quality (AHRQ); 2011 Jan.

## Extent of Measure Testing

All HEDIS measures undergo systematic assessment of face validity with review by measurement advisory panels, expert panels, a formal public comment process and approval by the National Committee for Quality Assurance's (NCQA's) Committee on Performance Measurement and Board of Directors. Where applicable, measures also are assessed for construct validity using the Pearson correlation test. All measures undergo formal reliability testing of the performance measure score using beta-binomial statistical analysis.

## Evidence for Extent of Measure Testing

Rehm B. (Assistant Vice President, Performance Measurement, National Committee for Quality Assurance, Washington, DC). Personal communication. 2015 Mar 16. 1 p.

## State of Use of the Measure

### State of Use

Current routine use

### Current Use

not defined yet

## Application of the Measure in its Current Use

### Measurement Setting

Ambulatory/Office-based Care

Ambulatory Procedure/Imaging Center

Emergency Department

Hospital Inpatient

Hospital Outpatient

Managed Care Plans

### Professionals Involved in Delivery of Health Services

not defined yet

### Least Aggregated Level of Services Delivery Addressed

Single Health Care Delivery or Public Health Organizations

## Statement of Acceptable Minimum Sample Size

Unspecified

## Target Population Age

Age 67 to 85 years

## Target Population Gender

Female (only)

# National Strategy for Quality Improvement in Health Care

## National Quality Strategy Aim

Better Care

## National Quality Strategy Priority

Prevention and Treatment of Leading Causes of Mortality

# Institute of Medicine (IOM) National Health Care Quality Report Categories

## IOM Care Need

Living with Illness

## IOM Domain

Effectiveness

# Data Collection for the Measure

## Case Finding Period

A 12-month (1-year) window that begins July 1 of the year prior to the measurement year and ends on June 30 of the measurement year

## Denominator Sampling Frame

Enrollees or beneficiaries

## Denominator (Index) Event or Characteristic

Clinical Condition

Encounter

Institutionalization

Patient/Individual (Consumer) Characteristic

## Denominator Time Window

not defined yet

## Denominator Inclusions/Exclusions

### Inclusions

Medicare-enrolled women age 67 to 85 years as of December 31 of the measurement year, with a Negative Diagnosis History and a fracture during the Intake Period

Identify all members who had either of the following during the Intake Period.

An outpatient visit (Outpatient Value Set), an observation visit (Observation Value Set) or an ED visit (ED Value Set), for a fracture (Fractures Value Set).

An acute or nonacute inpatient discharge for a fracture (Fractures Value Set). To identify acute and nonacute inpatient discharges:

Identify all acute and nonacute inpatient stays (Inpatient Stay Value Set).

Identify the discharge date for the stay.

If the member had more than one fracture, include only the first fracture.

### Note:

Members must have been continuously enrolled 12 months (1 year) before the Index Episode Start Date (IESD) through 180 days (6 months) after the IESD.

*Allowable Gap:* No more than one gap in enrollment of up to 45 days during the continuous enrollment period.

*Negative Diagnosis History:* A period of 60 days (2 months) prior to the IESD when the member had no diagnosis of fracture.

*For fractures requiring an inpatient stay,* use the date of admission to determine a Negative Diagnosis History.

*For direct transfers,* use the first admission to determine the Negative Diagnosis History.

*IESD:* The earliest date of service for any encounter during the Intake Period with a diagnosis of fracture.

*For an outpatient or emergency department (ED) visit,* the IESD is date of service.

*For an inpatient encounter,* the IESD is the date of discharge.

*For direct transfers,* the IESD is the discharge date from the last admission.

*Intake Period:* A 12-month (1-year) window that begins on July 1 of the year prior to the measurement year and ends on June 30 of the measurement year. The Intake Period is used to capture the first fracture.

### Exclusions

Test for Negative Diagnosis History. Exclude members who had either of the following during the 60-day (2-month) period prior to the IESD.

An outpatient visit (Outpatient Value Set), an observation visit (Observation Value Set) or an ED visit (ED Value Set) for a fracture (Fractures Value Set).

An acute or nonacute inpatient discharge for a fracture (Fractures Value Set). To identify acute and nonacute inpatient discharges:

Identify all acute and nonacute inpatient stays (Inpatient Stay Value Set).

Identify the discharge date for the stay.

Exclude members who met any of the following criteria:

Members who had a bone mineral density (BMD) test (Bone Mineral Density Tests Value Set) during the 730 days (24 months) prior to the IESD.

Members who had a claim/encounter for osteoporosis therapy (Osteoporosis Medications Value

Set) during the 365 days (12 months) prior to the IESD.

Members who received a dispensed prescription or had an active prescription to treat osteoporosis (refer to Table OMW-C in the original measure documentation for a list of osteoporosis therapies) during the 365 days (12 months) prior to the IESD.

*For an acute or nonacute inpatient IESD, use the IESD date of admission to determine the number of days prior to the IESD.*

Fractures of finger, toe, face and skull are not included in this measure.

#### Value Set Information

Measure specifications reference value sets that must be used for HEDIS reporting. A value set is the complete set of codes used to identify the service(s) or condition(s) included in the measure. Refer to the [NCQA Web site](#)  to purchase HEDIS Volume 2, which includes the Value Set Directory.

## Exclusions/Exceptions

not defined yet

## Numerator Inclusions/Exclusions

#### Inclusions

Appropriate testing or treatment for osteoporosis after the fracture defined by any of the following criteria:

A bone mineral density (BMD) test (Bone Mineral Density Tests Value Set), in any setting, on the Index Episode Start Date (IESD) or in the 180-day (6-month) period after the IESD

If the IESD was an inpatient stay, a BMD test (Bone Mineral Density Tests Value Set) during the inpatient stay

Osteoporosis therapy (Osteoporosis Medications Value Set) on the IESD or in the 180-day (6-month) period after the IESD

If the IESD was an inpatient stay, long-acting osteoporosis therapy (Long-Acting Osteoporosis Medications Value Set) during the inpatient stay

A dispensed prescription to treat osteoporosis on the IESD or in the 180-day (6-month) period after the IESD. Refer to table OMW-C in the original measure documentation for a list of osteoporosis therapies.

#### Exclusions

Unspecified

#### Value Set Information

Measure specifications reference value sets that must be used for HEDIS reporting. A value set is the complete set of codes used to identify the service(s) or condition(s) included in the measure. Refer to the [NCQA Web site](#)  to purchase HEDIS Volume 2, which includes the Value Set Directory.

## Numerator Search Strategy

Fixed time period or point in time

## Data Source

Administrative clinical data

Pharmacy data

## Type of Health State

Does not apply to this measure

## Instruments Used and/or Associated with the Measure

Unspecified

## Computation of the Measure

### Measure Specifies Disaggregation

Does not apply to this measure

### Scoring

Rate/Proportion

### Interpretation of Score

Desired value is a higher score

### Allowance for Patient or Population Factors

not defined yet

### Standard of Comparison

not defined yet

## Identifying Information

### Original Title

Osteoporosis management in women who had a fracture (OMW).

### Measure Collection Name

HEDIS 2016: Health Plan Collection

### Measure Set Name

Effectiveness of Care



## Measure Subset Name

Musculoskeletal Conditions

## Submitter

National Committee for Quality Assurance - Health Care Accreditation Organization

## Developer

National Committee for Quality Assurance - Health Care Accreditation Organization

## Funding Source(s)

Unspecified

## Composition of the Group that Developed the Measure

National Committee for Quality Assurance's (NCQA's) Measurement Advisory Panels (MAPs) are composed of clinical and research experts with an understanding of quality performance measurement in the particular clinical content areas.

## Financial Disclosures/Other Potential Conflicts of Interest

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## Endorser

National Quality Forum - None

## NQF Number

not defined yet

## Date of Endorsement

2014 Dec 30

## Adaptation

This measure was not adapted from another source.

## Date of Most Current Version in NQMC

2015 Oct

## Measure Maintenance

Unspecified

## Date of Next Anticipated Revision

Unspecified

## Measure Status

This is the current release of the measure.

This measure updates previous versions:

National Committee for Quality Assurance (NCQA). HEDIS 2015: Healthcare Effectiveness Data and Information Set. Vol. 1, narrative. Washington (DC): National Committee for Quality Assurance (NCQA); 2014. various p.

National Committee for Quality Assurance (NCQA). HEDIS 2015: Healthcare Effectiveness Data and Information Set. Vol. 2, technical specifications for health plans. Washington (DC): National Committee for Quality Assurance (NCQA); 2014. various p.

## Measure Availability

Source available for purchase from the [National Committee for Quality Measurement \(NCQA\) Web site](#)

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For more information, contact NCQA at 1100 13th Street, NW, Suite 1000, Washington, DC 20005; Phone: 202-955-3500; Fax: 202-955-3599; Web site: [www.ncqa.org](http://www.ncqa.org) .

## Companion Documents

The following are available:

National Committee for Quality Assurance (NCQA). The state of health care quality 2015.

Washington (DC): National Committee for Quality Assurance (NCQA); 2015 Oct. 205 p.

National Committee for Quality Assurance (NCQA). HEDIS 2016: Healthcare Effectiveness Data and Information Set. Vol. 2, technical update. Washington (DC): National Committee for Quality Assurance (NCQA); 2015 Oct 1. 12 p.

For more information, contact the National Committee for Quality Assurance (NCQA) at 1100 13th Street, NW, Suite 1000, Washington, DC 20005; Phone: 202-955-3500; Fax: 202-955-3599; Web site: [www.ncqa.org](http://www.ncqa.org) .

## NQMC Status

This NQMC summary was completed by ECRI on June 16, 2006. The information was not verified by the measure developer.

This NQMC summary was updated by ECRI on January 31, 2007. The updated information was not verified by the measure developer.

This NQMC summary was updated by ECRI Institute on February 28, 2008. The information was verified by

the measure developer on April 24, 2008.

This NQMC summary was updated by ECRI Institute on March 12, 2009. The information was verified by the measure developer on May 29, 2009.

This NQMC summary was retrofitted into the new template on June 29, 2011.

This NQMC summary was updated by ECRI Institute on June 1, 2012, April 2, 2013, January 20, 2014, January 14, 2015, and again on January 7, 2016.

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## Production

### Source(s)

National Committee for Quality Assurance (NCQA). HEDIS 2016: Healthcare Effectiveness Data and Information Set. Vol. 1, narrative. Washington (DC): National Committee for Quality Assurance (NCQA); 2015. various p.

National Committee for Quality Assurance (NCQA). HEDIS 2016: Healthcare Effectiveness Data and Information Set. Vol. 2, technical specifications for health plans. Washington (DC): National Committee for Quality Assurance (NCQA); 2015. various p.

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